

Apple-Works Forum

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TABLE OF CONTENTS

Letters to NAUG	2	My Favorite Macro	22
<ul style="list-style-type: none">• MouseText on the Apple IIe and IIc.• How to get better MouseText.• How to save money calling the BBS.		<ul style="list-style-type: none">• A macro that cleans up your custom dictionaries.• How to check your dictionary.• Problems with the AppleWorks spell checker.	
My Favorite Template	3		
<ul style="list-style-type: none">• How to produce individualized student grade reports.			
Software Review	8	AppleWorks News	25
<ul style="list-style-type: none">• AppleShare 3.0: Is this improved file sharing system worth the cost?• Spoolers and buffers: How they work.• Apple releases AppleShare 3.0.1		<ul style="list-style-type: none">• New printers from Hewlett-Packard.	
General Interest	13	Educational Applications	26
<ul style="list-style-type: none">• AppleWorks inits: What they are and how they work.• How to install and use inits.		<ul style="list-style-type: none">• How to play "AppleWorks Anagrams".	
Classifieds	16	Special Offers	27
AppleWorks News	16	<ul style="list-style-type: none">• Discounts from Magical Software.	
<ul style="list-style-type: none">• News from Apple, MECC, and Wm. C. Brown.		Public Domain Update	28
UltraMacros Primer	17	<ul style="list-style-type: none">• Barrows Utilities – Disk 6 and Stock Market Templates now in the NAUG library.	
<ul style="list-style-type: none">• How to use dot commands and labels.		Special Offers	29
Special Offers	20	<ul style="list-style-type: none">• Special offers from NAUG and Balloons Software.	
<ul style="list-style-type: none">• Special offers from Dan's Macro City and The Writing Notebook.		Members Helping Members	30
		<ul style="list-style-type: none">• Help with the AppleWorks modules.	
		Electronic Index Disk Update	32
		NAUG Membership	32

Support for AppleWorks and ///EZ Pieces Users

MouseText on Apple IIe and IIC Screens

Dear Cathleen,

Thanks for publishing the articles that describe how to print MouseText in your documents and display MouseText on your screen. *[Ed: These articles appeared in the September and October 1992 issues of the **AppleWorks Forum**.]*

Note that Apple IIC, IIC Plus, and enhanced Apple IIe computers display slightly different graphics than those described in the October article. Specifically, those computers display the left and right-hand portions of a running man as the MouseText equivalents of the letters "F" and "G" on the screen. The running man characters are not available on the Apple IIGs. These differences occur because the Apple IIGs uses a different video ROM than the one built into the Apple IIC, IIC Plus, and enhanced Apple IIe computers.

Although the techniques described in the articles work with any of these computers, you should expect different screen output from these systems.

Interestingly enough, the manual that Apple ships with the Apple IIC, IIC Plus, and enhanced Apple IIe computers shows the MouseText characters generated by the IIGs, not the characters generated by the IIe and IIC computers. This is even true of the "platinum" Apple IIe computers currently shipped by Apple.

Of course, the differences in the video ROMs do not affect your printed output, which depends on the ROM chips inside the ImageWriter II. The printed output corresponds to the output described in the September article.

Howard Katz
Batavia, Illinois

The **National AppleWorks Users Group (NAUG)** is an association that supports AppleWorks users. NAUG provides technical support and information about AppleWorks and enhancements to that program. Our primary means of communicating with members is through the monthly newsletter entitled the **AppleWorks Forum**.

How to Get Better MouseText

Dear NAUG,

You can get darker MouseText printouts from an ImageWriter II printer by printing the MouseText characters in boldface. Just put a Boldface Begin Command before the MouseText Begin Command and your ImageWriter will produce darker, more fully formed MouseText characters.

Marshall Cohen
East Brunswick, New Jersey

Save Money on the BBS

Dear Cathleen,

Here's a way to save 20% of the long distance costs associated with using the NAUG electronic bulletin board service:

NAUG uses MCI for its long distance service. MCI offers a 20% discount for callers who enroll in the company's "Friends and Family" or "Friends of the Firm" discount programs. List the NAUG BBS's number with MCI and you automatically receive the extra 20% discount. Give Tim Harrison's name (Tim is the System Operator of the board) as the person you are adding to your calling "Circle".

Pete Crosta
Nutley, New Jersey

[Ed: Thanks for the money saving tip, Pete. For more information, call MCI at (800) 444-3333 from a residential telephone or (800) 444-2222 from a business phone.]

AppleWorks Forum

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How to Produce Individualized Student Grade Reports

by Stan Hecker

This is the second of two articles that describe how teachers can use AppleWorks to maintain and report student grades. The author assumes that you know how to create a new data base and a mail merge document.

My first experience with microcomputer generated grade reporting came in an Educational Statistics class taught by Dr. Norman Bell at Michigan State University. Before we left Dr. Bell's classroom, we knew our strengths and weaknesses, our score on the day's quiz, and how we compared with earlier and concurrent class sections.

This month's article will show you how to use AppleWorks 3.0 to prepare such individualized reports for your students. The templates you will create this month can help you provide fast and frequent feedback to your students and help lighten your workload. By the end of this article, you will be able to produce the individualized student report that appears in *Figure 1*. [Ed: Working copies of these templates appear on this month's issue of *NAUG on Disk*, which costs \$10 from NAUG. *NAUG on Disk* requires a 3.5-inch disk drive. The templates require AppleWorks 3.0.]

An Overview

You will start by adding a lookup table to last month's gradebook template; the lookup table will add an appropriate comment to each student's record. Then you will use the AppleWorks clipboard to transfer the data into the data base file that appears in *Figure 2*. Finally, you will

Figure 1: The Student Report

November 3, 1992

Dear Carolyn Franklin:

Your weighted average class score is 82. Your grade, if letter grades were given at this point in the semester, would be "B." The minimum weighted score is 89.6 for an "A", 79.6 for a "B", 69.6 for a "C", and 59.6 for a "D."

We can raise your scores; let's discuss it.

Here are the specifics:

TEST SCORES

10/4/92	11/3/92	1/10/93
90	88	

Your lowest test score is disregarded, so your current overall test score is 90--which is 60% of your total grade. If you miss a test and the corresponding make-up test, then I must give you a zero score for that test.

HOMEWORK SCORES

9/13/92	10/11/92	12/13/92	1/10/93
70	70		

These average to 70, which is 40% of your grade.

If you believe you have turned in an assignment which doesn't appear above, please see me. Keep up your progress; you are responsible to meet each homework deadline. If you do not, I have to give you a zero score for any missed assignment.

My office hours are 3:30-5:00 pm each class day. You are welcome to come in any day for a visit, a discussion, help with the work, or any other reason. Good luck in class!

use AppleWorks' mail merge capabilities to incorporate those data into letters for your students.

The difficult part of this process is developing the templates. Once you create the templates, generating the student reports goes quickly.

Figure 2: Mail Merge Data Base

```
File: GRADES.DB          CHANGE NAME/CATEGORY      Escape: Review/Add/Change

Category names
=====
Last Name                |
First Name               | Options:
Test1                   |
Test2                   | Change category name
Test3                   | Up arrow  Go to previous category
Hwk1                    | Down arrow Go to next category
Hwk2                    | A-I       Insert new category
Hwk3                    | A-D       Delete this category
Hwk4                    |
Test Avg                |
Homework Avg            |
Weighted Avg            |
Letter Grade            |
Unused Category         |
Comment                 |
-----
Type entry or use ⌘ commands                298K Avail.
```

Figure 3: Additions to the Spreadsheet Template

```
File: Gradebook2          REVIEW/ADD/CHANGE      Escape: Main Menu
=====N=====O=====
1|
2|Lookup table for students not averaging "A" or "F" overall:
3|-100    See me to reverse the decline in your scores.
4|-5      We can raise your scores; let's discuss it.
5|5       Good work improving your score! Keep it up!
6|
7|Comments for students averaging "A" or "F" overall:
8|    Great work! You know the material well!
9|    You are not passing. See me...now, please!
10|
11|    @IF(A11="", "", @IF(L11>L5, O8, @IF(L11<L2, O9, @LOOKUP(D11-C11, N3...N5))))
12|    @IF(A12="", "", @IF(L12>L5, O8, @IF(L12<L2, O9, @LOOKUP(D12-C12, N3...N5))))
13|    @IF(A13="", "", @IF(L13>L5, O8, @IF(L13<L2, O9, @LOOKUP(D13-C13, N3...N5))))
14|    @IF(A14="", "", @IF(L14>L5, O8, @IF(L14<L2, O9, @LOOKUP(D13-C14, N3...N5))))
15|    @IF(A15="", "", @IF(L15>L5, O8, @IF(L15<L2, O9, @LOOKUP(D14-C15, N3...N5))))
16|    @IF(A16="", "", @IF(L16>L5, O8, @IF(L16<L2, O9, @LOOKUP(D15-C16, N3...N5))))
17|
18|
-----
N2: (Label) Look-up
Type entry or use ⌘ commands                298K Avail.
```

Assumptions

I will describe how to create small templates that accommodate only four students, three tests, and four homework assignments. That will reduce the time it takes to create the templates and ensures that NAUG members who run AppleWorks on 128K systems can load and use the examples. You should expand the templates to suit your needs.

I will assume that the school year is just past mid-term and that the students took their second test

and submitted their second major homework assignment.

Modifying the Spreadsheet

You will start by adding a lookup table and the appropriate text and formulas to the gradebook template you developed last month. Follow these steps:

1. Load the GRADEBOOK template onto your AppleWorks desktop.
2. Issue an Apple-Z to display the formulas on the screen.
3. Use the Arrow Keys to put column N at the left edge of the screen.
4. Use the Apple-L command to narrow column N one character to eight characters. Use the same command to make column O 66 characters wide, using the whole screen width to display columns N and O.
5. Enter the values -100, -5, and 5 in cells N3 through N5. In the zoomed view, the values will line up against the left edge of the cell, as in *Figure 3*. In the "unzoomed" view, the digits will line up at the right edge of the cell.

6. Enter the text shown in cells N2 through O2 and N7 through O7 in *Figure 3*. Then enter the text in cells O3 through O5 and cells O8 and O9.

7. Put the cursor in cell O11 and enter the following formula:

```
@IF(A11="", "", @IF(L11>L5, O8, @IF(L11<L2, O9,
@LOOKUP(D11-C11, N3..N5))))
```

See *Figure 4* for an interpretation of this formula.

My Favorite Template...

This formula results in one of the messages listed in *Figure 5*.

8. Copy the formula from cell O11 into cells O12 through O16. Specify "Relative" when the highlighted cell contains the number 11 (A11, D11, and so forth) and "No Change" when the highlighted cell does not contain "11" (L5, N3, etc.).
9. Put the cursor in cell N1, issue an Apple-L command, and change the label format for the block of cells N1...O18 to "Left Justified".
10. Press Apple-Z to hide the formulas.
11. Press Apple-K to tell AppleWorks to do a calculation.
12. Save the file to disk. If you locked your original template, you must unlock the file or change the name of the revised template before saving your work.

Building the Data Base Template

Now you will create a data base template to store the data you will merge into your final report. Proceed as follows:

1. Create a new AppleWorks data base file from scratch; call it GRADES.DB.
2. Create the categories shown in *Figure 2*. Each category corresponds to one of the columns in your gradebook spreadsheet.
3. Type "ZZZZZZ" in the Last Name category in the first record in the file. Press the Return Key.
4. Press the Escape Key to switch to REVIEW/ADD/CHANGE mode.
5. Press Apple-Z to display the record in multiple record layout.
6. Issue an Apple-L and widen the Comment category from its default width of 15 characters to 60 characters.

Figure 4: Interpreting the Formula in Cell O11

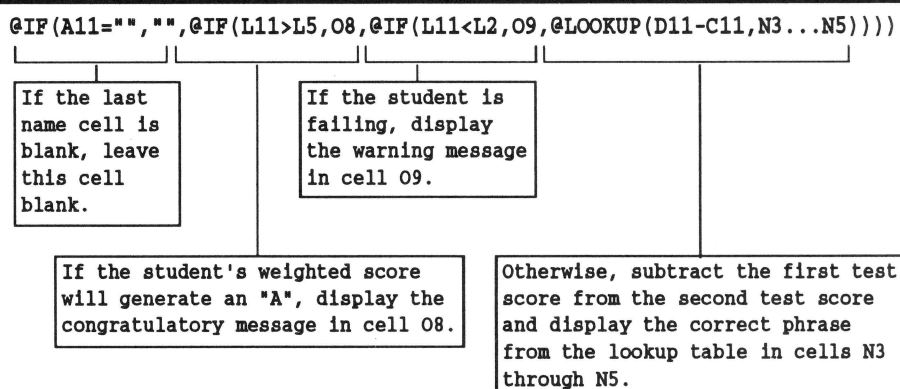


Figure 5: Comments for Each Condition

Condition	Message
Grade of A:	Great work! You know the material well!
Grade of F:	You are not passing. See me...now, please!
Test 2 +/- 5 points Test 1:	We can raise your scores; let's discuss it.
Test 2 5 points lower than Test 1:	See me to reverse the decline in your scores.
Test 2 >5 points higher than Test 1:	Good work improving your score! Keep it up!

7. Save the template. You can use BASIC, Time-Out FileMaster, or Copy II+ to lock the template. [Ed: See the article entitled "How to Lock Your Templates" in the May 1991 issue of the *AppleWorks Forum* for the necessary step-by-step directions.]

Building the Word Processor Template

Now you will create the word processor document in *Figure 6*. Later you will use that document to print the individual student reports. Continue as follows:

1. Issue an Apple-C command and copy the data base record from the GRADES.DB data base file to the clipboard. Copying the record establishes the categories for the mail merge process.
2. Create a new word processor document called MIDTERM.MMM. The file name will remind you that this is a midterm report to students and that the document is a "mail merge master".
3. Press Apple-Z so AppleWorks will display the print commands.

Figure 6: Mail Merge Master Document

```
Dear ^<First Name> ^<Last Name>:

Your weighted average class score is ^<Weighted Avg>. Your grade, if
letter grades were given at this point in the semester, would be
"<Letter Grade>." The minimum weighted score is 89.6 for an "A", 79.6
for a "B", 69.6 for a "C", and 59.6 for a "D."

<Comment>

Here are the specifics:

TEST SCORES
-----Tab Ruler
^ 10/4/92^ 11/3/92^ 1/10/93^
^ ^<Test1> ^ ^<Test2> ^ ^<Test3>

Your lowest test score is disregarded, so your current overall test
score is <Test Avg>--which is 60% of your total grade. If you miss a
test and the corresponding make-up test, then I must give you a zero
score for that test.

HOMEWORK SCORES
^ 9/13/92^ 10/11/92^ 12/13/92^ 1/10/93^
^ ^<Hwk1> ^ ^<Hwk2> ^ ^<Hwk3> ^ ^<Hwk4>

These average to <Homework Avg>, which is 40% of your grade.

If you believe you have turned in an assignment which doesn't appear
above, please see me. Keep up your progress; you are responsible to
meet each homework deadline. If you do not, I have to give you a zero
score for any missed assignment.

My office hours are 3:30-5:00 pm each class day. You are welcome to
come in any day for a visit, a discussion, help with the work, or any
other reason. Good luck in class!

-----New Page
```

4. Issue an Apple-O and then type "PD" to put a Print Date Command in the document. Then press the Escape Key.
5. Press the Return Key three times.
6. Type the word "Dear" followed by a blank space. Then issue an Apple-O command and insert the mail merge codes for the First Name and Last Name categories. Respond "No" to the "Omit line when all entries on line are blank?" question.
7. Press the Escape Key, the Delete Key, and type a colon. The salutation line should look like the example in *Figure 6*.
8. Press the Return Key twice. Then type the next paragraph of the document and insert the Weighted Avg and Letter Grade mail merge

codes where they appear in *Figure 6*. Again, respond "No" to the "Omit line when all entries on line are blank?" question. Press the Delete Key after each mail merge code to delete the blank space that would appear after that code.

9. Press the Return Key twice to start a new paragraph.
10. Insert the Comment category. Respond "Yes" to the question about omitting the blank line; otherwise AppleWorks will print a blank line if you eliminate the comment from a student's record.
11. Continue typing until you get to line 17.
12. Issue an Apple-T command and create a new Tab Ruler. Press the letter "N" to erase all the tabs, then establish center tabs at columns 12, 24, 36, and 48. Finally, press the Escape Key.
13. Press the Tab Key. Then type the date 10/4/92. Repeat this process and add the dates 11/3/92 and 1/10/93. Then press the Return Key to move to line 19.
14. Press the Tab Key and insert the mail merge reference to the Test1 category. Then press the Return Key. Respond "No" to the "Omit line..." prompt. Press the Tab Key again and insert the Test2 and Test3 categories.
15. Continue typing the document (insert the Test Avg code where appropriate) until you get to line 28.
16. Press the Tab Key and type the date "9/13/92". Repeat this step entering the dates "10/11/92", "12/13/92", and "1/10/93". Then press the Return Key.
17. Press the Tab Key and enter the mail merge code for Hwk1. Respond "No" to the "Omit line..." prompt. Repeat this step and add codes for the Hwk2, Hwk3, and Hwk4 categories. Press the Return Key twice at the end of the line.

My Favorite Template...

18. Finish typing the document and enter a New Page Command after the last line of text.
19. Spell check and then save the document. Once again you can use BASIC, TimeOut FileMaster, or Copy II+ to lock the file.

Using the Templates

Now you will use the templates to prepare the student reports. Proceed as follows:

1. Load the GRADEBOOK, GRADES.DB, and MIDTERM.MMM templates onto the AppleWorks desktop.
2. Use the Apple-N command to change the name of each file to GRADEBOOK2, GRADES.DB2, and MIDTERM.MMM2. That will preserve the original templates.
3. Enter the student names and data shown in *Figure 7* into the GRADEBOOK2 spreadsheet. Then press Apple-K to tell AppleWorks to do the calculations.

Now you will use AppleWorks' clipboard to transfer the spreadsheet data into the data base file. Continue as follows:

4. Put the cursor in cell A11, issue an Apple-C command and select "To clipboard".
5. Select "Rows" from the Copy Menu, use the Down Arrow Key to highlight rows 11 through 14, and press the Return Key.
6. Issue an Apple-Q and switch to the file GRADES.DB2.
7. Issue an Apple-M and move the student records from the clipboard into the GRADES.DB2 data base file.
8. Inspect the data in the GRADES.DB2 data base and personalize any comments you want to change.

Figure 7: Gradebook Template with Student Totals

File: Gradebook2			REVIEW/ADD/CHANGE								Escape: Main Menu		
=====A=====B=====C=====D=====E=====F=====G=====H=====I=====J=====K=====L=====M=====													
1										Set minimums	0.0	F	
2	AppleWorks									for each grade	59.5	D	
3	Gradebook									here----->	69.5	C	
4											79.5	B	
5	(Lowest test score is									Set weighting	89.5	A	
6	disregarded.)									of tests here:			
7										.60 .40			
8	Last	First	---Tests---			--Homework--			--Averages--		-Weighted-		
9	Name	Name	1	2	3	1	2	3	4	Tests Homewk	Avg Grade		
10	=====												
11	Franklin	Carolyn	90	88		70	70			90.0 70.0	82.0	B	
12	Henderson	Tom	55	70		70	60			70.0 65.0	68.0	D	
13	Washington	Robert	80	55		80	79			80.0 79.5	79.8	B	
14	Wharton	Keesha	96	92		100	93			96.0 96.5	96.2	A	
15												-	
16												-	
17	=====												
18	CLASS AVERAGES		80	76		80	76			84 78	82		

A11: (Label, Layout-L, Protect-L) Franklin													
Type entry or use ⌘ commands													
												298K Avail.	

Now, you will move the student data to the mail merge clipboard and use AppleWorks' mail merge power to produce the personalized reports. Continue as follows:

9. Put the cursor on the first student's record, press Apple-M and move all the student records to the clipboard. Only the record with "ZZZZZZ" in the last name field will remain in the data base.
10. Issue an Apple-Q, switch to the word processor file MIDTERM.MMM2, issue an Apple-P, and indicate that you do want to merge the data. AppleWorks should print four individual student reports like the example in *Figure 1*.

Conclusion

As you can see, the tight and easy-to-use integration of the three AppleWorks modules and the availability of AppleWorks' mail merge feature makes it easy to produce individualized reports from your spreadsheet and data base files. Creative users will find many ways to generalize the procedures outlined in this article to meet their unique needs and applications.

[Stan Hecker is on the administrative staff at Michigan State University, East Lansing, Michigan, and is a partner in H&H Consulting, a Michigan concern specializing in school district financial and population analyses.]

AppleShare 3.0: A Better File Sharing System

by John Link

Networking is not for everyone. But classrooms and offices equipped with many stand-alone computers and not enough peripherals for every system are prime candidates for a network. Networks also make it easy for users to share their data files and applications.

Users who would benefit from a network should take a serious look at AppleShare 3.0, the newest version of Apple Computer's networking software. AppleShare runs on any Macintosh computer connected to an AppleTalk network and supports up to 120 concurrent Apple II, Macintosh, and MS-DOS computers connected to that network. At \$1199 (list), AppleShare 3.0 is a reasonably priced solution for networking needs when compared to software for MS-DOS systems that costs several times as much. On the other hand, networking software is usually bundled free with Unix, although it is the most expensive of the popular operating systems.

What Is Networking?

A computer network is any system of hardware and software that lets a remote computer (called a "client") use a hardware resource connected to a master computer (called a "server") as if the resource were directly connected to the client. Powerful networks running under Unix let users send world-wide electronic mail, share a single

Figure 1: System 7 File Sharing vs. AppleShare 3.0

	System 7	AppleShare 3.0
Minimum RAM	2 MB	4 MB
Print serving (true spooling)	No	Yes
Concurrent users	10	120
Allows sharing an entire hard disk	Yes	Yes
Allows sharing specific folders on a hard disk	Yes	Yes
Allows use of fileserver for other applications	Yes	Yes
Automatic access setting of moved folders	No	Yes
Controls software user license limits	No	Yes
Allows multiple "superusers"	No	Yes
Allows changing CD-ROM while server is running	No	Yes
Provides message service to individual users	No	Yes
Runs AppleWorks Classic from server	No	Yes
Runs AppleWorks GS from server	Yes	Yes
Provides diskless network startup for Apple IIs	No	Yes
Easy to understand manual	Extra Cost	Yes

central processing unit (CPU), and redirect their output to any screen or printer on the network.

The standard Macintosh and Apple II operating systems do not support these sophisticated network services but accommodate less demanding tasks with ease. For example, setting up a shared printer under the Apple system requires little more than attaching LocalTalk cables to the printer and workstations.

However, users who want to share files on hard disks or CD-ROM drives, or who need to control how others use their computers, must move beyond a printer network. AppleShare is Apple's software solution for these problems.

AppleShare networks let you concurrently load an "AppleShare aware" application stored on the server's hard disk into the memories of many remote computers and run that application on the client computers. This is an effective substitute for a true

Spoolers and Buffers

Printing has always been a bottleneck for computers. We often have to wait while our printers produce the documents we prepared on our systems. However, manufacturers offer software and hardware solutions that can improve our work efficiency.

A “spooler” is software running on a master computer that intercepts data a remote computer sends to the printer. The server stores those data on the spooler’s hard disk as fast as it can be sent through the cables and tells the remote computer that it finished the print job. The user then resumes his or her work while the spooler takes over the task of negotiating the print job with the printer.

A “print buffer” is a hardware solution to the same problem; the print buffer stores data sent to the printer in memory and then releases the computer. Because print buffers use memory chips to store data, they cannot accommodate the large amount of data sent to the printer by Macintosh computers and by programs that use the graphic capability of your printer (such as AppleWorks GS). Finally, print buffers do not work when connected to an AppleTalk network.

multiple user system such as Unix. AppleShare also offers much of the functionality of Unix when it comes to sharing hard disks, CD-ROM drives, and print spoolers among multiple workstations.

System 7 vs. AppleShare

Any Macintosh running System 7 can provide file-sharing for up to ten Apple II and/or Macintosh computers. However, filesharing under System 7 is significantly less powerful than under AppleShare. *Figure 1* summarizes these differences. Note that users cannot launch AppleWorks Classic from a System 7 server, although they can use the System 7 server to share their AppleWorks data files.

AppleShare 3.0 offers features not available under System 7 or in earlier versions of the AppleShare product. Those new features include support for a non-dedicated server.

Connecting Macintosh and Apple IIGS computers to the AppleShare network does not require addi-

tional software. Adding Apple IIe computers to the network requires you to equip those computers with an extra cost workstation card.

Although you can share most data files under either a System 7 or AppleShare fileserver, you must use AppleShare if you want your Apple II workstations to boot from system software located on the server instead of their local floppy or hard disks.

Networking and AppleWorks

Connecting Apple II computers to a server gives users most of the benefits of having their own dedicated hard disk system. Students running AppleWorks and AppleWorks GS will appreciate the server; it eliminates the need to swap disks as they work.

However, AppleWorks Classic and AppleWorks GS are not “AppleShare aware”. That means you must store multiple copies of each program in separate folders on the server so each client system can launch a separate copy of the programs. Claris publishes a network version of AppleWorks Classic that is generally more robust than the standard version and which does not require this administrative workaround. That lets everyone on your network run from a single copy of the program. There is no network version of AWGS.

Print Spooling

Aside from the obvious contrasts between support for ten and 120 simultaneous clients, the most important difference between System 7 filesharing and AppleShare is that AppleShare offers true print spooling. *[Ed: See the sidebar entitled “Spoolers and Buffers” for more information about print spooling.]*

System 7 offers only background printing, which divides the computer’s processor time between getting the job printed and performing other tasks. As a result, the computer’s response to mouse and keyboard input often becomes erratic and unpredictable during a background printing session. Many Macintosh users find this performance penalty so severe that they stop using background printing.

AppleShare, AppleTalk, and LocalTalk

For a time, Apple used the terms AppleTalk and LocalTalk interchangeably to designate their approach to networking printers. However, Apple introduced the necessary distinctions between these terms as their systems got more sophisticated.

AppleTalk refers to the software protocol that organizes packets of information that file servers, clients, and printers use to communicate with each other.

LocalTalk is the standard cabling hardware that Apple sells to connect the computers.

Ethernet is a vastly superior cabling system originally developed for Unix networks that is now finding a place in Macintosh networks. (Apple never developed an Ethernet card for its Apple II computers.)

The AppleTalk protocol for packaging information works just as reliably with Ethernet cabling as it does with LocalTalk, but data moves across an Ethernet cable about ten times as fast. AppleTalk combined with Ethernet is sometimes called EtherTalk, but it still appears as "AppleTalk" in the Macintosh Chooser.

AppleShare is the software that organizes the relationship between the server and client computers. Like AppleTalk, it works with either LocalTalk or Ethernet cabling.

By contrast, almost everyone who experiences print spooling likes it because their computer is generally free of the printing burden in just a few seconds.

Installation and Ease of Use

AppleShare 3.0 is easy to learn and use. AppleShare's point and click menus are clear and understandable; the manual explains everything you need to know in comprehensible detail while avoiding diversions that might confuse you. The new manual is much clearer than the manuals provided with earlier versions of AppleShare.

Installing AppleShare 3.0 is easy. If you are upgrading a version 2.0 server, the AppleShare 3.0

installer automatically modifies all the user information currently stored on your hard disk so it will work under the new software. A novice system administrator could have an entire system up and running in a matter of hours, although fine tuning the user privileges might take several weeks of intermittent tinkering.

Hardware Requirements and Performance

Apple specifies four megabytes as the minimum amount of RAM for AppleShare 3.0, but eight megabytes is more practical, especially if you want to use the server for other work. Users with more memory can set up a large disk cache that further accelerates system operation and saves wear on the server's hard drive.

AppleShare's performance is adequate for most tasks and is generally limited by the restrictions imposed by the LocalTalk cabling. (Ethernet is significantly faster than LocalTalk, but Apple does not offer an Ethernet card for the Apple II. Consequently, you must use LocalTalk or equivalent cabling if you want to connect Apple II computers to your server.) Although this limitation has little impact on printing performance, it does slow down file transfers. For example, trying to launch AppleWorks GS on 20 workstations simultaneously can take ten minutes or longer. In practice this is not as annoying as it might appear, since users often arrive at their workstations at different times and have different work routines. But there will be times when this is a real bottleneck. The sidebar entitled "AppleShare, AppleTalk, and LocalTalk" provides some information which can help you understand this problem.

Non-Dedicated Server

Earlier versions of AppleShare required a "dedicated server", a Macintosh computer that would run the network software and could not be used for other applications. AppleShare 3.0 supports non-dedicated operation of the server, which means that you can run applications such as ClarisWorks on the master computer while others use it for file transfers and print spooling. The software provides a "throttle" that lets you apportion the host's CPU between the stand-alone application and the network.

Although only the Quadras have the power to comfortably serve a large number of clients and a busy local user simultaneously, teachers can use the fileserver to run applications when the students are not making heavy demands on the network.

Bugs and Problems

AppleShare 3.0 is stable; I did not experience any system crashes or client data transfer problems while testing the system. However, there is a bug in the Print Server 3.0 software that adds a 1.5-inch margin to the bottom of each page sent from a Macintosh to an ImageWriter printer. This causes serious formatting problems on multi-page documents. Your vendor should supply version 3.0.1 of the Print Server, which fixes this problem. [Ed: See the sidebar entitled "Apple Releases AppleShare 3.0.1" for more information about this problem.]

Whether to Buy

As indicated earlier, AppleShare 3.0 costs \$1199, but Apple let registered users upgrade to version 3.0 for \$199 if you owned the AppleShare 2.0 Print Server, otherwise the upgrade cost \$299. At either price, AppleShare is an excellent value. However, Apple's upgrade offer expired on July 31, 1992 and AppleShare owners must now pay full price for the new software.

If you already own an earlier version of AppleShare, you may have difficulty accepting Apple's upgrade policy, especially if your organization frowns upon paying full price for a new version of a product it already owns. (See the sidebar entitled "Why Does Apple Treat Us This Way?" for more information.) Now that Sears sells a Performa 200 for the same price as AppleShare, you may be just as well off using the \$1200 to buy one of the Performas and staying with AppleShare 2.0 if it meets your needs. Figure 2 summarizes the differences

Figure 2: AppleShare 2.0 vs. 3.0

	2.0	3.0
Minimum RAM	2 MB	4 MB
Minimum system software	System 6	System 7
Print serving (true spooling)	Extra Cost	Included
Concurrent users	50	120
Allows sharing an entire hard disk	Yes	Yes
Allows sharing specific folders on a hard disk	No	Yes
Allows use of fileserver for other applications	No	Yes
Automatic access setting of moved folders	No	Yes
Controls software user license limits	No	Yes
Allows multiple "superusers"	No	Yes
Allows changing CD-ROM while server is running	No	Yes
Provides message service to individual users	No	Yes
Runs AppleWorks Classic from server	Yes	Yes
Runs AppleWorks GS from server	Yes	Yes
Provides diskless network startup for Apple IIs	Yes	Yes
Easy to understand manual	No	Yes

Apple Releases AppleShare 3.0.1

As this issue went to press, MacWeek reported that Apple quietly released AppleShare 3.0.1, which fixes problems in versions 3.0 of the AppleShare software. According to MacWeek, the new version of AppleShare includes the 3.0.1 Print Spooler mentioned in the accompanying article and fixes incompatibilities between AppleShare and CE Software's popular QuickMail software. AppleShare 3.0.1 also fixes problems users had backing up server data to remote archives using AppleTalk Remote Access and Retrospective Remote. AppleShare 3.0.1 also lets administrators view Shared Item Reports for files stored on the server.

Finally, AppleShare 3.0.1 supports as-yet-unannounced system enhancements, such as the international two-byte character set included with System 7.1.

MacWeek reports that Apple added AppleShare 3.0.1 to the Apple price list on September 14. Apple will not confirm or deny the MacWeek article or discuss its upgrade plans for AppleShare 3.0 owners. NAUG members who want information about upgrading from AppleShare 3.0 should contact their local dealer, educational representative, or the Apple Customer Support line at (800) 776-2333.

Why Does Apple Treat Us This Way?

Until version 3.0, AppleShare owners had to dedicate a complete Macintosh system to file sharing, even when their client stations were not in use. That Macintosh is often the most powerful computer in the network. Since AppleShare 3.0 no longer requires a dedicated server, it is no surprise that AppleShare owners want to upgrade to AppleShare 3.0.

Unfortunately, this is the first time many of them will hear about the upgrade because Apple did not notify registered AppleShare owners that an upgrade path existed. Instead, they sent press releases to selected publications. [Ed: Neither NAUG nor

C•WUG received this press release from Apple.]

The decision about when, how, and whether to mention the upgrade news was left to those publications. While some editors published the announcement, it was typically a small bit of news in the midst of many articles, advertisements, and other matters. Consequently many AppleShare owners never understood there was an upgrade plan nor the benefits of the new software.

Apple discontinued this upgrade program July 31, and AppleShare owners must now pay the same price paid by non-owners of the software. This is unusual, to say the least. Many upgrade pro-

grams continue indefinitely because owners may not need the additional features an upgrade offers immediately and because most companies appreciate their paying customers more than Apple's actions convey.

Apple's failure to notify registered users of this upgrade calls into question the entire customer registration process and does not speak well for Apple. I believe the AppleShare product should be transferred to Claris Corporation, Apple's software subsidiary. Claris has an excellent record of concern and service for its customers.

— John Link

between versions 2.0 and 3.0 to help guide your decision.

Users with just a few computers that would benefit from networking might consider using the filesharing bundled with System 7 on the Macintosh. You can move to AppleShare 3.0 if the bundled file-sharing proves inadequate.

However, users with serious network needs should give careful consideration to AppleShare 3.0. It is an excellent, easy-to-use, and (with the Print Server 3.0.1) robust product.

[John Link is a Professor of Art at Western Michigan University. He is the developer of SuperPatch, LockOut, and is an AppleWorks consultant.]

[NAUG's attempts to get Apple to extend the AppleShare 3.0 upgrade program were unsuccessful. We remain concerned about Apple's AppleShare upgrade policy and suggest that members who own earlier versions of AppleShare discuss this problem with their local Apple Educational Representative. Please notify NAUG of any success you experience in these efforts.]

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AppleWorks Inits: What They Are and How They Work

by Randy Brandt

The most recent innovation in the field of AppleWorks add-ons is the introduction of AppleWorks “inits”. This article describes what they are and how they work.

What Are They?

The term “inits” comes from the world of Macintosh and Apple IIGS computers, both of which let you put special “init” files in a designated directory. The Macintosh and GS/OS operating systems run these programs during the bootup (or “initialization”) process. (That explains the origin of the term “inits”.) Macintosh and GS/OS inits enhance or patch the system.

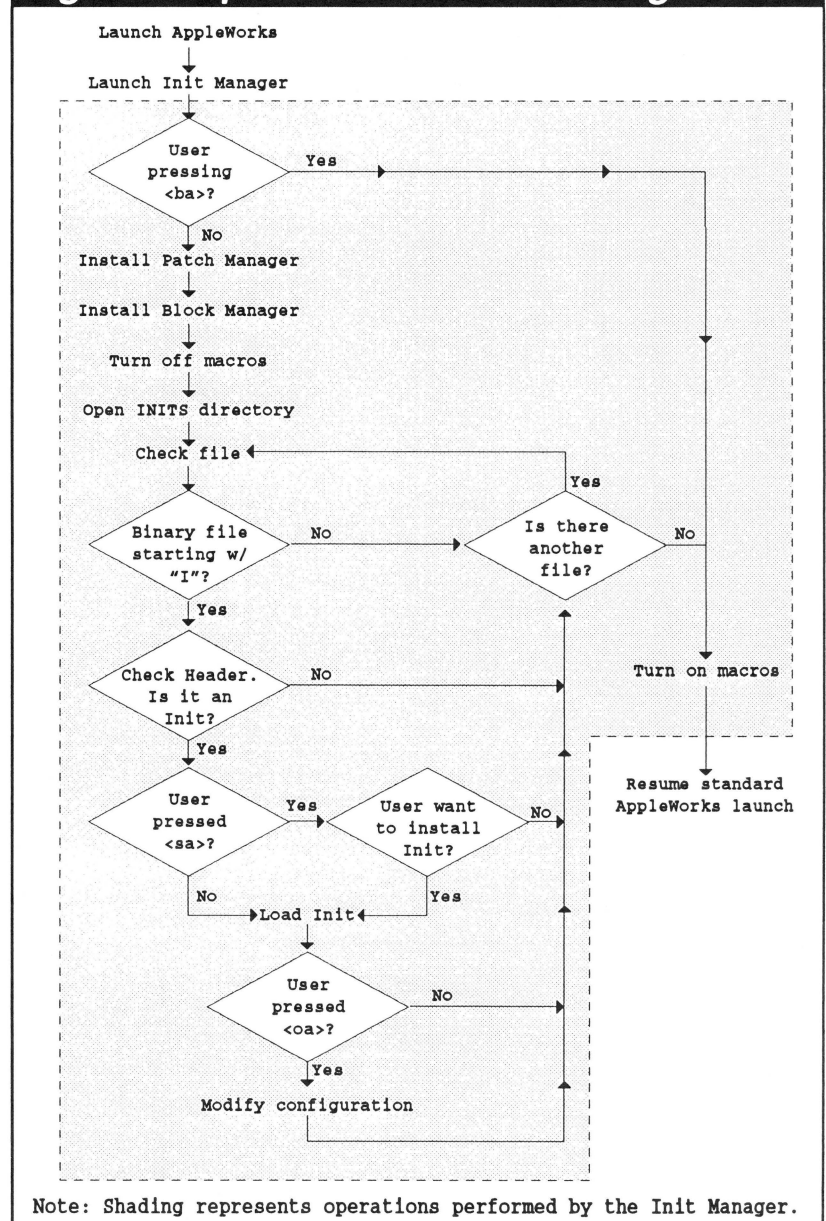
AppleWorks inits affect AppleWorks the same way Macintosh and GS/OS inits enhance their operating systems. AppleWorks inits run during the AppleWorks startup process just after AppleWorks installs the appropriate memory management routines. That lets the inits use the available AppleWorks desktop memory to store their programs which can then hook into AppleWorks.

History

I developed the concept of inits while I was devising a way to hook OmniPrint into AppleWorks. (OmniPrint is a word processor enhancement that lets you control your ImageWriter II from within AppleWorks.) I needed a way to hook OmniPrint into the word processor and a way to preload the OmniPrint fonts onto the desktop for easy access.

I originally patched AppleWorks so it ran a file

Figure 1: Operation of the Init Manager



called SEG.OP at bootup; SEG.OP preloaded the fonts and hooked into AppleWorks. That worked well and the approach seemed to have other uses.

How to Install and Use Inits

Disks containing inits come with a BASIC program that installs the current version of the Init Manager. The program creates an AW.INITS directory on your AppleWorks startup disk, patches APL-WORKS.SYS to run the Init Manager, and copies SEG.IM to the startup disk. Sometimes the program automatically copies inits into the AW.INITS directory and other times it does not; that lets you copy only the inits you want to add to your system.

Each init adds unique functionality to AppleWorks. Inits such as SpellCopy and FileCount run automatically and do not require intervention by the user. Other inits (such as OmniPrint and Spreadsheet Titles) are activated by particular keystrokes. Still other inits (such as QuickLoad and QuickPath) display entirely new menu and entry options when you access their features. Whatever the case, all of these inits continue to enhance AppleWorks in ways its creator never imagined.

The logical result was to create a managing program that could load any number of add-ons. This is somewhat like the TimeOut scheme except that the programs run during the bootup process instead of merely loading their names into a menu for later access.

With that figured out, I changed SEG.OP into the OmniPrint init (I.OMNIPRINT) and developed SEG.IM (the Init Manager) which installs all the inits present in the AW.INITS directory.

How It Works

During the bootup process, AppleWorks runs the Init Manager, a program stored in the file SEG.IM. *Figure 1* presents a schematic representation of the sequence of operations of the Init Manager.

SEG.IM begins by installing a Patch Manager and a Block Manager in AppleWorks. Inits use the Patch Manager to hook into the various AppleWorks segments while you run AppleWorks. The Block Manager stores and retrieves blocks of desktop memory used by init programs.

Once the managers are in place, the Init Manager temporarily turns off macros so that startup macros

will work properly no matter what happens during the init installation. It then opens the AW.INITS directory and scans the list of files for inits, which are binary files whose names begin with "I."

When the Init Manager finds a file that might be an init, it loads the file and checks some header information to make sure the file is truly an init compatible with this version of the manager (version 4.0 of the Init Manager checks for my son Michael Jonathan's initials). AppleWorks could crash on bootup if the Init Manager runs an incompatible init.

Once a file passes the identification process, the Init Manager places the init name on the screen. If the user presses the Solid-Apple Key when the Init Manager starts, it displays the name and version number of each init and asks if it should install the init. If the user selects "yes", the Manager runs the init. If not, it skips that init.

An Example

Let's use the TotalControl init as an example. TotalControl starts by checking the AppleWorks preload flag. If the data base is not set to preload, the init exits back to the Init Manager.

If preloading is on, the init uses the AppleWorks routine to draw a thermometer. It then opens the SEG.TC file and loads the various segments onto the AppleWorks desktop as it indicates its progress on the thermometer. When the entire TotalControl program is loaded, the init exits.

Once the init returns to the Init Manager, the Manager scans for the next init in the AW.INITS directory and repeats the process. After it runs the last init, the Init Manager closes the AW.INITS directory, restores the status of the original macros, and lets AppleWorks continue by running the TimeOut startup routine.

Startup Options

As mentioned earlier, users can hold down the Solid-Apple Key on bootup to manually choose which inits to install. Holding down both Apple Keys skips the inits altogether. Holding down the Open-Apple Key lets you modify any configuration options provided by your inits. For example,

JEM Announces Init City

Init City is a collection of more than a dozen AppleWorks inits by Randy Brandt and Mark Munz planned for release this winter by JEM Software. Although the disk is still under development, several of the inits are already in use on JEM Software's Apple IIGs computer.

QuickLoad: QuickLoad prompts you for a file name if you press <oa-return> in response to the "Get files from the current disk" prompt. That saves time if you want to load a single file from a large directory and do not want to wait for AppleWorks to read in and sort the entire file list before letting you pick the file. It is especially convenient with macros which can use QuickLoad to load files almost instantly.

QuickPath: QuickPath displays a menu of user-defined pathnames if you press <oa-return> whenever AppleWorks lets you change the current disk. You select the new path and QuickPath leaves you at the "Get/List/Delete files" option. Pressing the Return Key

shows the list of files in the new directory. This is more convenient than using a TimeOut application such as PathMan, since QuickPath requires fewer keystrokes and works within the natural "flow" of loading files or changing drives.

FileCount: FileCount displays the number of files on the desktop whenever you add files to the desktop. As you select files with the Right Arrow Key, FileCount increments the counter until you reach 12. FileCount stops you from getting the message about selecting too many files, which forces you to repeat the entire file selection process.

SS Values: To see your standard spreadsheet settings in AppleWorks you must enter an Apple-? and scroll down 46 lines to the bottom of AppleWorks' Help Menu. SS Values displays the current settings in a pop-up window whenever you press <oa-v>.

MultiDesktop: MultiDesktop lets you access up to 36 AppleWorks

files by installing three separate desktops in AppleWorks. You move between desktops by pressing the Tab Key at the <oa-Q> Desktop Index.

SmartSave: SmartSave patches AppleWorks so the <oa-ctrl-s> keystroke only saves a changed file. It restores the current pathname after the save.

SuperMenus: SuperMenus patches AppleWorks so it selects single-digit numbered menu items as soon as you enter the number. Other patches accomplish this same goal, but the patches make AppleWorks incompatible with many third party macros. Putting this function in an init lets you use the Solid-Apple option to de-select the init at bootup when you want to use a macro program that requires normal menu operation.

Many other inits are planned for Init City; I will describe those inits in future issues of the *AppleWorks Forum*.

— Randy Brandt

hold down the Open-Apple Key and the SpellCopy init on the TimeOut-Central November 1992 disk lets you choose the location for your dictionaries and lets you automatically copy the files to that location during bootup.

So What's Out There?

The first published init was the <oa-H> init which lets the user print the screen, copy the screen to the clipboard, or copy the screen image (including MouseText) to the clipboard.

I distributed the latest versions of the <oa-H> init and SpellCopy on the November 1992 TimeOut-

Central disk along with a useful new spreadsheet init called Spreadsheet Titles. This init will use the first two rows as titles when you print any portion of the spreadsheet. It will repeat these titles at the top of each page in multi-page printouts.

JEM Software's TotalControl and DB Pix use inits to preload themselves. JEM's entire OmniPrint program is contained in an init, which also handles font file preloading. And Ultra 4 uses inits to install its clock, screen blanker, debugger, and all the dot commands.

JEM's upcoming Init City (see sidebar) will include about a dozen inits that add features to every AppleWorks module.

General Interest...

Writing Inits

I expect that many AppleWorks users would like to develop their own inits, but writing inits requires proficiency as a 6502 assembly language programmer and a working knowledge of the internal routines in AppleWorks. Developers with that background should get JEM Software's Init Manager Developer's Kit which costs \$75. The kit includes sample Merlin source files for creating inits and a one-year license that lets you include the Init Manager on the disks you distribute.

Conclusion

The availability of inits gives AppleWorks users yet another way to tailor their AppleWorks environments to their personal preferences and needs. This technology will help AppleWorks continue growing well into the 1990's.

[Randy Brandt, an author of AppleWorks 3.0 and Editor of TimeOut-Central, is the developer of numerous AppleWorks enhancements including Ultra 4. He claims to write software only because no one will pay him for playing ice hockey.]

[JEM Software, 7578 Lamar Court, Arvada, Colorado 80003; (303) 422-4856 for 24-hour Visa/MasterCard order line or fax.]

[A one-year subscription (6 disks) to TimeOut-Central costs \$48 from Resource Central, Box 11250, Overland Park, Kansas 66207; (913) 469-6502; Fax: (913) 469-6507.]

Classifieds

MAMMOTH SPANISH CUSTOM SPELLING DICTIONARY for AppleWorks 2.x and 3.0. A must for teachers and invaluable for all. For free information, send letter size SASE to: Clipvision, 1440-A-Engracia Ave, Torrance, CA 90501; (310) 328-2887.

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AppleWorks News

Late News for NAUG Members

Apple Computer

Apple announced the recall of approximately 60,000 PowerBook 100 computers that could develop an electrical problem that burns a hole in the PowerBook case.

Owners of PowerBook 100s with serial numbers below SQ211xxxxxx and SS216xxxxxx should call Apple's new PowerBook 100 Safety Helpline at (800) 572-1731 between 9am and 8pm Eastern time to arrange for repairs. Apple will have the units picked up, repaired, and returned at no charge. Turnaround time will be about three days. NAUG's international members should contact their local dealer for repair information.

MECC

The Minnesota Educational Computer Corporation (MECC) recently announced the release of its new 1992-93 Education Catalog. This free 80-page catalog lists the 175 educational programs and other products available from this large developer of educational software.

[MECC, 6160 Summit Drive North, Minneapolis, Minnesota 55430; U.S.: (800) 685-MECC; Canada: (800) 663-7731; International: (612) 569-1500.]

Wm. C. Brown

Teachers who use computers in their classrooms should request the new *Software and Video Catalog* from Wm. C. Brown Publishers. This free 170-page catalog lists more than 4,000 Apple II, Macintosh, and MS-DOS programs, videodisks, CD-ROMs, and videotapes available from the company.

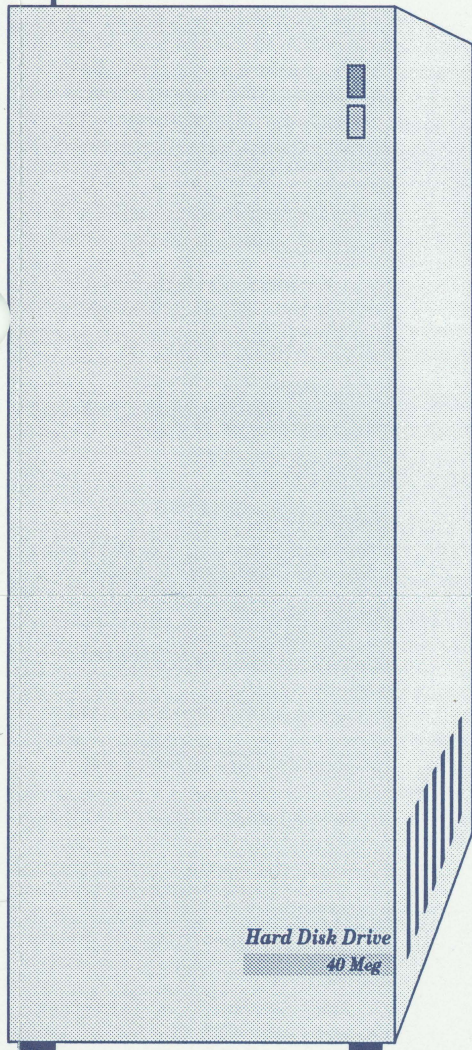
The company also offers a *Computer Applications, Information Systems, and Computer Science Catalog* for teachers of computer science courses.

[Wm. C. Brown Publishers, 2460 Kerper Boulevard, Box 539, Dubuque, Iowa 52001; (800) 338-5578; (319) 588-1451. Computer Science Catalog: (800) 228-0459.]

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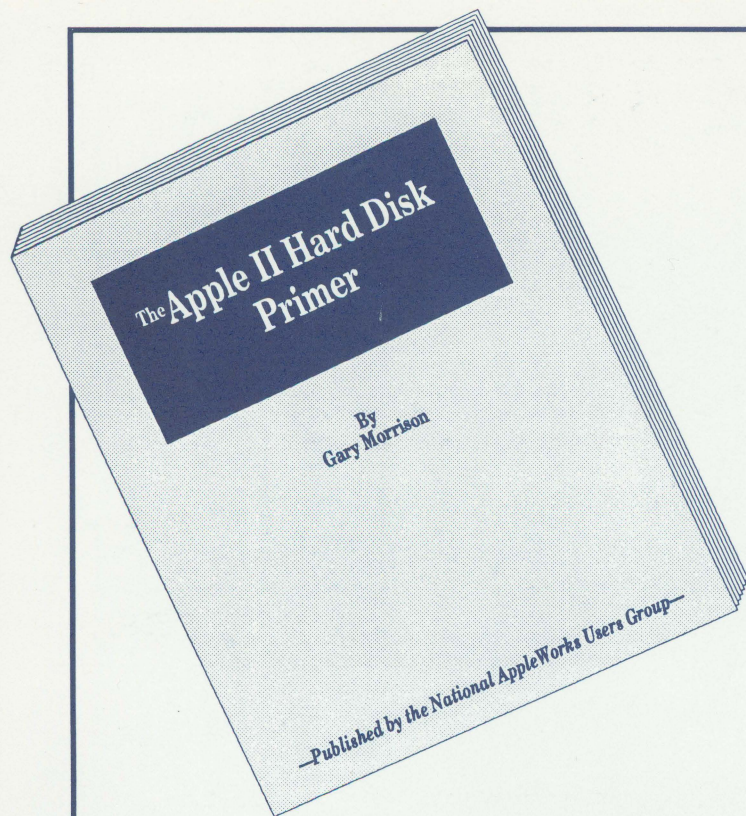


The chapters in this book describe:

- ◆ How to select a hard disk drive.
- ◆ How to connect a hard disk to your computer.
- ◆ How to configure your computer for a hard disk.
- ◆ How to install an operating system.
- ◆ How to organize the files on your drive.
- ◆ How to use hard disk management software.
- ◆ How to install AppleWorks and AppleWorks enhancements on a hard disk.
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- ◆ How to back up and optimize your disk.
- ◆ How to solve common hard disk drive problems.

The 136-page **Apple II Hard Disk Primer** is fully indexed, includes a foreword by Ruth Witkin, and costs \$10.25 (regularly \$16.95) from the National AppleWorks Users Group.

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—Ruth Witkin, inCider Magazine

The **Apple II Hard Disk Primer** is the perfect “how to” book for users who have just purchased a hard disk drive, those thinking about upgrading their system, and hard disk owners who want to get more from their computers. Chapters in the book compare the different types of hard drives and take you through the step-by-step procedures necessary to install and configure your hard disk drive. Other chapters describe how to use hard disk management programs, how to install AppleWorks, AppleWorks GS, and other programs on the drive, and suggest ways to back up and optimize your drive. The **Apple II Hard Disk Primer** is a valuable addition to your Apple II library.

Mail or fax to:

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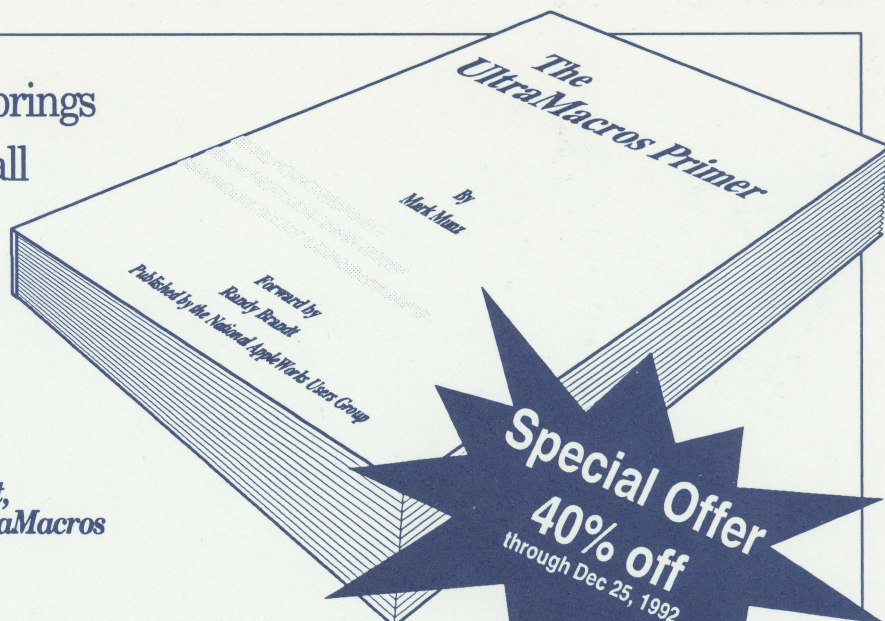
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“The UltraMacros Primer brings the power of UltraMacros to all AppleWorks users. I am impressed by the clear and interesting presentation of each lesson in this book.”

—Randy Brandt,
Author of UltraMacros



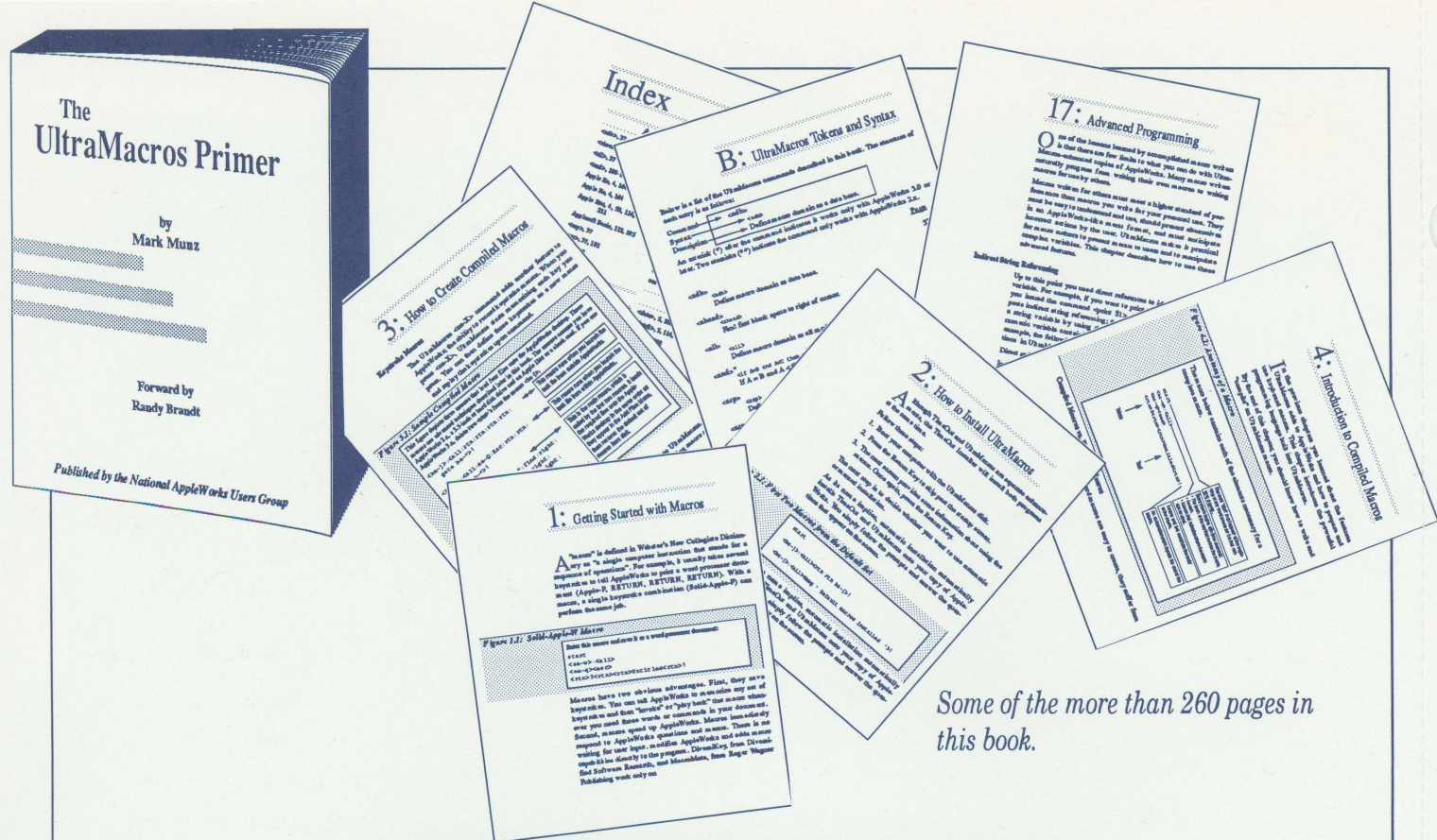
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The UltraMacros Primer teaches you everything you need to know to use TimeOut UltraMacros. This 260 page manual contains many examples and suggestions to help you:

- Install UltraMacros,
- Use the commands UltraMacros adds to AppleWorks,
- Create keyboard macros,
- Write compiled macros,
- Develop macros that can "branch",
- Develop menus to prompt users for input,
- Use recursive macros to execute repetitive tasks,
- Develop macros that can read the screen,
- Design task files that customize your AppleWorks modules,
- Debug your compiled macros, and
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The book is clearly illustrated with dozens of useful sample macros. It describes applications for both AppleWorks 2.x and 3.0, and includes a summary of the new commands available for AppleWorks 3.0.

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How to Use Dot Commands and Labels in Ultra 4

by Mark Munz

*This is the second in a series of articles that describe how to use the new features of Ultra 4. The author assumes you know the basics of UltraMacros programming and that you read his article in last month's issue of the **AppleWorks Forum**.*

Ultra 4 offers “dot commands” and “labels” that make it easier to create more powerful and readable macros for AppleWorks. Dot commands represent a major expansion to the UltraMacros programming language. Labels are macros for macro writers. This month's article describes how to use these new features built into Ultra 4.

The Ultra 4 documentation includes a description of the purpose and syntax of each command. This month you will learn about the background and structure of these commands to help you understand the Ultra 4 documentation. Next month we will examine a macro that uses these features.

Dot Commands

The addition of dot commands is arguably the most significant new feature added to Ultra 4. Dot commands, so named because they start with a period or “dot”, let third party developers add up to 500 user-defined commands to UltraMacros. Page 12 of the September 1992 issue of the **AppleWorks Forum** lists and describes the 45 dot commands included with Ultra 4.

You should realize that dot commands behave like any other UltraMacros command. That is, dot commands can behave like stand-alone commands such as <find> and <bell>, they can require parameters, and they can pass back strings or numeric values.

Stand-Alone Commands

<.spacebar> is an example of a stand-alone dot command that tells UltraMacros to display the familiar “Press Spacebar to continue” message.

The macro continues when the user presses the spacebar. <.spacebar> has no parameters.

The <.online> command, which checks if a file you specify exists and is available on one of the current disks or directories, is a stand-alone command that takes a parameter. For example, <.online “/ram5/datafile”> checks if /ram5/datafile exists and is online. Like many UltraMacros commands, <.online> passes back a value through the value of variable Z and sets variable Z to either 0 (not found) or 1 (found).

String Commands

String commands return a string and must be part of a string definition. They behave like <screen> and <str\$> in UltraMacros 3.x. For example, <\$1 = .upper “Text”> converts the string passed to it into the uppercase equivalent. Thus \$1 would contain “TEXT” after the macro executes the command.

<.getpath> is a string command that retrieves the pathname of the current file. For example, <\$1 = .getpath> stores the pathname of the current file in variable \$1.

Numeric Commands

Numeric commands, which behave like <val> and <asc> in earlier versions of UltraMacros, return a number between zero and 65535 and must be part of a numeric equation. For example, <x = .eof> is a numeric command that stores the end of file value in variable x. After a macro executes this line, variable x will contain the number of the last word processor line, the last data base record, or the last

Figure 1: Correctly and Incorrectly Defined Labels

```
#titlePage = "MacroWorld"    // Wrong; won't be recognized since it is
                               // before the "labels" token.

labels
#welcome = "Welcome"        // Legal
#verify = sa-M               // Legal
#tempStr = $23               // Legal
#tempVar = A(2)              // Legal

@title = $1                  // Illegal, wrong character.
#title2=$1                   // Illegal, no spaces around "=".
#title3 = $2 + #title2       // Illegal, cannot contain other labels.
myMacro = sa-M               // Illegal, must start with a # character.

start
#gotoEnd = oa-9              // Wrong; won't be recognized
                               // since it is after the start token.
```

numeric equivalent of the column represented by a string. For example, `<z = .column "AB">` stores the number 28 in variable z.

`<z = .colwidth 2>` stores the width of column B in variable z.

Library Files

Dot commands come in "library files" which are special AppleWorks inits that contain the code that defines the

Figure 2: Labels that Call Subroutines

UltraMacros 3.1

```
K:<all:
  msgxy 255,128 :      { Center on the message line.    }
  msg ' Press a key to continue ':
  sa-G :               { Get a keypress.                }
  sa-S :               { Reset msgxy.                   }
  sa-M :               { Clear message.                 }
>!
S:<asr: msgxy 0,128>!
G:<asr: z = key >!
M:<asr: msg "" >!
```

Ultra 4

```
labels
#resetMsgXY = sa-S      // Reset msgxy.
#getKey = sa-G          // Get a keystroke.
#clrMsg = sa-M          // Clear the message area.
start
K:<all:
  msgxy 255,128 :      // Center on the message line.
  msg ' Press a key to continue ':
  #getKey :
  #resetMsgXY :
  #clrMsg :
>!
<#resetMsgXY>:<asr: msgxy 0,128 >!
<#getKey>:<asr: z = key >!
<#clrMsg>:<asr: msg "" >!
```

commands. You add commands to Ultra 4 by copying a library file into the AppleWorks inits directory. The Init Manager will then add the commands and information needed by the compiler to Ultra 4 when you launch AppleWorks. [Ed: See *Randy Brandt's article on page 13 of this issue of the AppleWorks Forum for more information about AppleWorks inits.*]

Ultra 4 comes with four libraries: Default, Database, Spreadsheet, and MenuTools. These provide the 45 dot commands described in Will Nelken's article about Ultra 4 on pages 11-16 of the September 1992 issue of the *AppleWorks Forum*. The soon-to-be-released Ultra Extras disk adds Math, MenuTools2, Goodies, IIGs, and other libraries of dot commands. These let you do decimal arithmetic with large numbers, support more menu options (such as scrolling lists, title boxes, and an "ask Yes/No" command), and `<ongoto>` and `<ongosub>` commands.

Unfortunately, writing dot commands requires proficiency as a 6502 assembly language programmer and a working

spreadsheet row that contains data. This is equivalent to including `<oa-9: posn z,x>` in a macro.

`<.column>` and `<.colwidth>` are other examples of numeric dot commands. `<.column>` returns the

knowledge of the internal routines in AppleWorks and UltraMacros. Developers with that background should get JEM Software's Dot Command Developer's Kit which costs \$75. The kit includes sample Merlin source files for creating dot commands

and a one-year license that lets you include the Init Manager on the disks you distribute.

Labels

As indicated earlier, “labels” are mini-macros that can replace macro names, text, Ultra 4 tokens, and even dot commands. Ultra 4’s support for labels lets you write shorter, more readable macros.

Using labels is a two step process. First, you define the labels in a labels section that must appear before the “start” command in your macro set. Then you can use the labels. As a result, your macro set takes the following structure:

```
labels
... label definitions
start
... macro definitions
end
```

Remember the following rules when defining labels:

1. All labels start with a “#”, which becomes a part of the label.
2. All label definitions must start with the “#” in the first column. You enter the name of the label, a space or tab, an equal sign, another space or tab, and your macro that defines the label.
3. A label definition must fit on a single line.

Figure 3: Labelling Your Variables

UltraMacros 3.1

```
N:<all:
  msg ' Enter Name ' :
  $1 = GetStr 20 :
  msg ' Enter Phone # ':
  $2 = GetStr 15 :
  msg $1 + ' : ' + $2 :
>!
```

Ultra 4

```
labels
#Name      = $1
#PhoneNo   = $2
start
N:<all:
  msg ' Enter Name ' :
  #Name = GetStr 20 :
  msg ' Enter Phone # ':
  #PhoneNo = GetStr 15 :
  msg #Name + ' : ' + #PhoneNo :
>!
```

Figure 4: Labels Used for Numeric Variables

```
labels
#theCount  = A(1)
#total     = T(9)
start
C:<all:
  #theCount = 10 : // Define the variables.
  #total    = 5 :
  #theCount = #theCount - #total : // Subtract one from the other.
  msg #theCount : // Display the result.
>!
```

Figure 5: Frequently Used Labels

```
#askYN      = .menubar $0,"No,Yes" //Ask yes/no question. Question is in $0.
#top        = oa-1 //Jumps to the top of a document or file.
#bottom     = oa-9 //Jumps to the bottom of a document or file.
#deleteALL  = oa-1:oa-M>T<oa-9:rtn //Moves everything to the clipboard.
#MyName     = Mark Munz
```

Figure 6: Labels for Tokens, Text, and Dot Commands

```
labels
#askYN      = .menubar $0,"No,Yes" //Ask yes/no question.
#top        = oa-1 //Jumps to the top of a document or file.
#bottom     = oa-9 //Jumps to the bottom of a document or file.
#deleteALL  = oa-1:oa-M>T<oa-9:rtn //Moves everything to the clipboard.
#MyName     = Mark Munz
start
x:<all:
  $0 = "Are you sure" : #askYN:// Setup and call dot command .menubar.
  #deleteALL : // Moves everything to the clipboard.
  #top : // Go to the top of the document.
  msg "Written by #MyName " : // #MyName is replaced with Mark Munz.
>!
```

4. A Return or the new “//” comments marker signifies the end of a label definition.
5. You cannot include other labels in a label definition.

UltraMacros Primer...

6. You can use up to 16,000 labels in any single set of macros.
7. You cannot use any of the reserved labels including #true, #false, #on, #off, or any other reserved labels listed on page 14 of the Ultra 4 manual.

Figure 1 depicts some correctly and incorrectly defined labels.

Labels as Substitutes

Labels can substitute for variable names, for calls to complete macros, and for subroutine names. For example, consider the macros in Figure 2 that demonstrate how to define and use a label as a substitute for a call to a subroutine macro. Both macros display the message: "Press a key to continue", wait for a key, and then clear the message.

Figure 3 demonstrates how to use labels to assign meaningful names to variables. You can then use those labels in the macro.

You can also use labels to name numeric variables. Once defined, you can use the labels in equations. For example, in Figure 4 `<#theCount = #theCount - #total>` is a legal statement once you define the #theCount and #total labels.

Figure 5 lists some of the labels I use in my macros.

Figure 6 presents a macro that demonstrates how you can use labels to define macro tokens, text, or dot commands.

Conclusion:

As you can see, dot commands and labels add significant power and flexibility to UltraMacros. Next month you will learn more about these features by examining a useful macro that demonstrates the syntax and some applications of both dot commands and labels.

[Mark Munz is a programmer with Beagle Bros, publishers of TimeOut UltraMacros.]

[The Ultra 4 and Ultra Extras package lists for \$60. Until December 31, NAUG members can get the package for \$47 plus \$3 s/h from JEM Software, 7578 Lamar Court, Arvada, Colorado 80003. Orders and fax: (303) 422-4856.]

Special Offers

Special Offers for NAUG Members

Dan's Macro City

Dan's Macro City recently announced the release of TCX/NAUG, an offline reader and message processor for NAUG's AppleWorks bulletin board, the Electronic Forum.

TCX/NAUG uses AppleWorks 3.0, TimeOut TeleComm 1.2, and TimeOut UltraMacros 3.1 or Ultra 4 to automate the sending and receiving of messages on the NAUG BBS.

The menu-driven TCX/NAUG program, which works entirely within AppleWorks, automatically downloads and uploads all new bulletin board and mail messages and lets you read and respond to those messages off-line.

TCX/NAUG regularly costs \$15. Until December 31, NAUG members can buy the program directly from the developer for \$10 postpaid. Specify if you want a 3.5-inch or 5.25-inch disk and an UltraMacros 3.1 or Ultra 4 version of TCX/NAUG when you order. Include a check with your order; the developer does not accept credit cards or purchase orders. *[Dan Crutcher, 322 Stilz Avenue, Louisville, Kentucky, 40206.]*

The Writing Notebook

The Writing Notebook is a quarterly journal designed to help K-12 teachers integrate technology into the teaching of writing in all subject areas. Each 48-page issue contains ideas, lesson plans, software reviews, and curriculum units for writing in social studies, language arts, science, and mathematics classes. A one-year subscription costs \$32.

The Writing Notebook recently released *Writing and Technology: Ideas that Work!*, a 264-page compendium of the best articles published in The Writing Notebook from 1989 through June 1992. *Writing and Technology* usually costs \$25; NAUG members who buy a subscription to The Writing Notebook for \$32 can purchase the compendium for only \$15 plus \$3.50 s/h. Include your NAUG membership number with your order. *[Visions for Learning, Box 1268, Eugene, Oregon 97440; (503) 344-7125.]*

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A Macro that Cleans Up Your Custom Dictionaries

by Keith Johnson

This month's article features a macro submitted by Steven Tyler of Lynden, Washington. Mr. Tyler's macro deletes duplicate words from your AppleWorks and TimeOut QuickSpell custom dictionaries. The macro requires AppleWorks 3.0 and works with UltraMacros 3.1 and Ultra 4.

When I first read Mr. Tyler's description of the macro, I was puzzled. How could duplicate words get into the dictionary? The spell checker scans the custom dictionary before it begins looking for misspelled words, so it should be aware of all the words in the list and not even present them as possible misspellings.

To check this, I loaded my custom dictionary into the AppleWorks data base module, sorted the words into alphabetical order, and was surprised to find the word "BETELGEUSE" (the name of a bright star) listed twice. *[Ed: See the sidebar entitled "How to Check Your Dictionary" for step-by-step directions that describe how to check your dictionary with AppleWorks. This month's macro automates those procedures.]*

After some experimenting, I found that you can get duplicate entries by misspelling a word, correcting the misspelled word presented by the spell checker, and then telling the spell checker to add the corrected word to the dictionary. Unfortunately, AppleWorks adds the word to the dictionary and does not check the dictionary for duplicates.

Deleting such duplicates may not seem important, but an AppleWorks 3.0 bug can cause problems if you leave duplicate words in the dictionary. The sidebar entitled "Problems with the AppleWorks Spell Checker" describes the details.

How to Use the Macro

1. Type the macro into a word processor file. *[Ed: NAUG on Disk users should load the DICS.MACRO file onto their desktop.]*

2. Replace /HD/AW in the line

```
oa-Y>/HD/AW<rtm
```

to reflect the location of your custom dictionary. (You usually store the dictionary in the same directory or disk that stores the AppleWorks program files. If you use copies of the original AppleWorks disks, the correct pathname is /APPLEWORKS.)

3. Change the line

```
>/HD/AW/CUST.DICTIONARY<rtm :
```

so the macro "knows" where to store the revised custom dictionary. (If you use the original disks, change this line to read >/APPLEWORKS/CUST.DICTIONARY<rtm.)

4. Compile and test the macro.
5. You will only use this macro occasionally, so you will probably not want to add the macro to your default macro set. Instead, go to the Macro Options Menu and create a new task file that contains only this macro.
6. To use the macro, insert the disk containing the Custom Dictionary, go to the Macro Options Menu, and select #1 ("Launch a new task"). Select the appropriate task file from the menu and press <sa-C> to clean up your dictionary.
7. Restore your default macro set by selecting Macro Options from the TimeOut Menu, pressing <oa-rtn>, and then pressing the Return Key.

Figure 1: Macro that Deletes Duplicate Words

```
C:<all><      { Define the macro.                                }
oa-Q : esc :  { Go to Main Menu.                            }
rtn          { Select "Add files to the Desktop".          }
>2<rtn :     { Select "From a different disk".              }
up :        { Select "ProDOS directory".                    }
oa-rtn :     { Choose to type the pathname.                 }
oa-Y>/HD/AW<rtn : { Clear the line and enter the pathname.                 }
>4<rtn :     { Select "Make a new file for the Data Base."   }
>2<rtn :     { Select "From a text (ASCII) file".            }
$Ø = "CUST.DICTIONARY" : { Store the name of the custom dictionary.                }
find : rtn : { Find the file.                                }
rtn :        { Choose "Tabs between categories..."        }
oa-A : rtn : rtn : { Arrange Category Ø1 alphabetically                    }
oa-Z : oa-9 : { Zoom in and go to the end of list.            }
$5 = screen 8,6,6 : { Read the screen location that will report the number of words }
                                     { in the list.                                }

x = val $5 : { Convert the string to a number.                }
oa-Z : oa-1 : { Zoom out and go to the beginning of the list.  }
begin :      { Begin a loop that compares two words.          }
  if x = 1 :  { If this is the last word...                      }
    oa-P :    { Go to the Reports Menu.                        }
    rtn : rtn : { Create a new tables format from scratch.      }
    >A<rtn :   { Name the report "A".                            }
    oa-P :    { Print the report.                                }
    $Ø = "A text" : { Store "A text" in variable $Ø.              }
    find : rtn : { Find "A text (ASCII) file on disk" on the Print Menu. }
    rtn :      { Select "Tabs between categories".              }
    >/HD/AW/CUST.DICTIONARY<rtn : { Define the pathname for printing.                            }
    >Y<        { Answer "Yes" to the replace old file prompt.    }
    oa-Q : esc : { Go to the Main Menu.                            }
    >4<rtn : rtn : up : rtn>Y< { Remove the file from the desktop.                            }
    >5<rtn : rtn>5<rtn : { Optional: Change the current disk drive to "5".              }
    esc : endmacro : { Return to the Main Menu and end the macro.          }
  else :      { If you are not at the last word...              }
    $1 = cell : { Read the current word into variable $1.        }
    down : $2 = cell : { Read the next word into variable $2.                        }
    if $1 = $2 { If the two words match...                          }
      oa-D rtn : { Delete the second word.                        }
      up :      { Move the cursor back to the first word.        }
      x = x - 1 : { Decrease the word count by one.                }
      rpt :      { Check the next word.                            }
    else x = x - 1 : { If they do not match, decrease the word count.  }
      rpt>!      { Check the next word.                            }
```

How the Macro Works

The macro starts by creating a new data base file from your custom dictionary. It then alphabetizes the list of words and determines the number of words in the list so it knows when to stop. Then the macro starts at the top of the list and compares pairs

of words looking for duplicates. If it finds a duplicate, it deletes one of the words and continues.

When the macro reaches the end of the list, it creates a new report and then "prints" the list to disk as a text file that replaces the original custom dictionary.

How to Check Your Dictionary

AppleWorks' data base module makes it easy to check and edit the words in your custom dictionary. The process involves using the text (ASCII) file containing the words to create a new data base file. You then edit the list with AppleWorks and "print" the file as a text file that serves as the new custom dictionary for AppleWorks.

Follow these steps to load the dictionary into a data base file, edit and replace the original dictionary:

1. Go to the AppleWorks Main Menu and select #1, "Add files to the Desktop".
2. Select #4, "Make a new file for the Data Base".
3. Select #2, "From a text (ASCII) file".
4. Use the Tab Key and the `oa-<` and `oa->` keys to navigate to the disk or directory that contains your AppleWorks program files. Then navigate to the CUST.DICTIONARY file,

select that file, and press the Return Key.

5. The file contains only one entry per record, so you can choose either "Tabs between categories, Returns between records" or "Return after each category". Press the Return Key to select the first choice.
6. Name the file "TEMPORARY" and press the Return Key. AppleWorks will create a new data base file that includes all the words in your custom dictionary.
7. Display the words in multiple record layout and issue an Apple-A to sort the words into alphabetical order.
8. Scroll through the words, correct any errors, delete duplicate entries, and add any new words you want in the dictionary.

Now you will replace the original dictionary with the edited word list. Continue as follows:

9. Issue an Apple-P command and press the Return Key to

indicate that you want to create a new tables format report. Assign a name to the report.

10. Press Apple-P a second time to indicate that you want to "print" the report.
11. Select "A text (ASCII) file on disk" from the Print the Report Menu.
12. Select #2, "Return after each category".
13. Enter the pathname to the original custom dictionary. For example, if you store your dictionary on the AppleWorks 3.5-inch Program Disk, enter /APPLEWORKS/CUST.DICTIONARY.
14. Select "Yes" to indicate that you want to replace the original dictionary.

AppleWorks will replace your original custom dictionary with your edited word list. You can now remove the data base file from the desktop; you do not need to save that file.

Technical Details, Possible Changes

Mr. Tyler's macro defines the drive in slot 5 as the active drive. You can omit this step or set any other device or default pathname by editing the line

```
>5<rtn : rtn>5<rtn :
```

about three-quarters of the way through the macro. For example, you can switch to a ProDOS pathname by replacing this line with

```
>5<rtn : rtn : up : oa-rtn>/pathname<rtn
```

Ambitious macro programmers can store the original pathname as a string and then restore this string

at the end of the macro. However, this is more than most of us will need, so I will leave it as an exercise for the reader.

Note the use of `<oa-rtn>` to enter pathnames. In AppleWorks 2.x, pressing the Return Key lets you enter the desired pathname. However, AppleWorks 3.0 requires you to press `<oa-rtn>` to enter pathnames directly. If you press the Return Key, AppleWorks 3.0 lists the current directory and expects you to navigate through the directories with the arrow keys. That would be nearly impossible with a macro.

Problems with the AW Spell Checker

AppleWorks 3.0 has a bug in its spell checker that affects the accuracy of the "unknown words" count in the spelling summary. Specifically, AppleWorks generates an incorrect "unknown words" count if a document contains a word that appears twice in your custom dictionary.

For example, imagine that you accidentally listed the word "UltraMacros" twice in your custom dictionary. If you use "UltraMacros" in a word processor document and run the spell checker, AppleWorks will incorrectly reduce the number of unknown words by one. If you have 15 misspelled words in your document, the spell checker summary will report 14 misspelled words. If you have eight misspelled words, the checker will tell you the value is seven.

If you have only one misspelled word, the spell checker will report that there are no misspelled words and will not let you correct the one misspelled word. This happens even if you do not use the spelling summary function!

And if you have no misspellings, the spell checker will think you have -1 (negative 1) misspelled word, which it displays as 65535 unknown words.

Each word you use in your document that has duplicate entries in the custom dictionary will reduce the value of unknown words count by one. However, using a word more than once in a document does not increase the discrepancy.

Clearly, you should delete the duplicate entries in your custom dictionary.

*[Keith Johnson is Associate Director of the Fleischmann Planetarium at the University of Nevada and a regular contributor to the **AppleWorks Forum**. Steven Tyler, of Lynden, Washington, is a delivery driver for Mt. Baker Mushroom Farms.]*

*[A working copy of this macro appears on this month's issue of **NAUG on Disk**, which costs \$10 plus \$2 s/h from **NAUG**. **NAUG on Disk** comes on a 3.5-inch disk. This macro requires AppleWorks 3.0.]*

Two New Printers from Hewlett-Packard

Hewlett-Packard recently introduced two new AppleWorks-compatible inkjet printers.

HP's DeskJet Portable is a 300 dot per inch black and white printer that offers performance and output comparable to the company's popular DeskJet 500 unit. The four pound, 12-inch by 2.5-inch by 5.75-inch portable lists for \$599. A 50-sheet feeder lists for an additional \$99 and a rechargeable battery lists for \$49.

The DeskJet Portable produces three pages of 150 dpi draft mode output or two pages of 300 dpi letter quality output per minute.

HP also released its new DeskJet 550C color printer which produces high quality color output almost four times faster than the company's DeskJet 500C printer. According to Hewlett-Packard, the new printer can produce draft mode output at three pages per minute, grey scale output at one page per minute, and one page of 24-bit color output in seven minutes.

The 550C includes all the fonts provided with the DeskJet 500 series plus portrait-mode Univers and landscape-mode Letter Gothic. The new printer also includes several new portrait-mode Times font sizes.

The HP DeskJet 550C lists for \$1099. From November 1, 1992 through May 31, 1993, owners of DeskJet 500C printers can trade up to the 550C for \$500; owners of DeskJet 500 and 500 Plus printers can upgrade for \$600. DeskJet 500 and 500C owners should call Hewlett-Packard at (800) 552-8500 after November 15 for the details of this upgrade offer.

Hewlett-Packard also reduced the list price for the DeskJet 500C printer from \$1095 to \$779.

Hewlett-Packard products are available from mail order vendors at significant discounts.

[Hewlett-Packard, Box 58059, MS511L-SJ, Santa Clara, California 95051; (800) 752-0900.]

How to Play "AppleWorks Anagrams"

by Phil Shapiro

This is the second of two articles that describe AppleWorks games you can use to improve students' reading and writing skills.

Although most writing activities start with a blank piece of paper, students can learn about writing by working backwards; that is, by re-assembling a story or passage that is broken apart into segments. The object is to get students to discuss and decide how the story fits together. This invites students to become "language detectives" as they learn how segments of prose fit together into a meaningful whole. With a little luck, such detective work will improve their own composition skills.

You will need a suitable story or passage (such as "The Great Ping Pong Ball Experiment" on NAUG's Shapiro's Jigsaw Puzzle Disk) for this exercise. If students respond well to this activity, you might try writing your own story. What better way to model to your students than to have them read material composed by their teacher?

Naming Your Files

Once you have the passage in AppleWorks, go to the Add Files Menu and create two blank word processor documents. Resist the temptation to name these files "File1" and "File2". Remember that in disassembling your passage, your aim is to create chaos, not orderliness.

Try naming each of these "story segment" files with different anagrams of the word puzzle (for example: "zupple", "lupzle", "pelzzu", and so on). Then use AppleWorks' Move Command and the AppleWorks clipboard to disassemble the passage.

Divide the first story into three separate files. Re-assembling three files is easy and gives students experience working with the game. Later you will

divide stories into five, six, and even seven segments depending on the age and reading ability of your students.

Step-by-Step Instructions

Follow these steps to create your first set of "anagrams":

1. Issue an Apple-N command and assign an "anagram" name to the original file. The first third of the story will remain in this file.
2. Issue an Apple-3 to put the cursor one-third of the way through the document.

Now you will move the bottom two-thirds of the document into another anagram file.

3. Press Apple-M and select "To clipboard". Then press Apple-9 to highlight all except the first third of the document. Press the Return Key to move this text to the clipboard.
4. Press Apple-Q and switch to another file on the desktop.
5. Press Apple-M and move the text from the clipboard into the new file. This file contains the bottom two-thirds of the original document.

Now you will move the last third of the document into a separate file. Continue as follows:

6. Issue an Apple-5. That puts the cursor at the beginning of the last half of the current file, which is about two-thirds of the way through the original document.
7. Press Apple-M and select "To clipboard". Then

Educational Applications...

press Apple-9 to highlight the last third of the original document. Press the Return Key to move this text to the clipboard.

8. Press Apple-Q and switch to the last anagram file and use the Apple-M command to move the text from the clipboard into the new file. This file contains the last third of the original document.
9. Save all three files.

Using the Files

Now you can use the files.

Start by loading all the "anagrams" onto the AppleWorks desktop. Have your students read the opening segment of the story. Then teach them how to use the Apple-Q command to browse through the other files on the desktop until they identify the segment they feel logically follows from the opening sentences. Have them use the Apple-M command to move that segment to the end of the opening segment.

Depending on how fast your students read, they should be able to piece together the entire passage in less than fifteen minutes.

Conclusion

AppleWorks Anagrams helps your students experience the sense of satisfaction that occurs when writers successfully join sentences together into a logical structure. Having tasted that experience, students may be more inclined to try their own hand at the writer's craft. Instead of searching the AppleWorks desktop for the next segment of their writing, they can search their own imaginations for the sentences that most logically follow.

[Phil Shapiro is the founder of Balloons Software, developers of Big Text Machine, Number Squares, and other Apple II educational software. You can reach Mr. Shapiro on GEnie as "p.shapiro1" or on America Online as "pshapiro".]

[Shapiro's Jigsaw Puzzle Disk costs \$4 (5.25-inch disk) or \$6 (3.5-inch disk) plus \$2 s/h per order from the NAUG Public Domain Library.]

Special Offers

Discounts from Magical Software

Magical Software announced the release of version 1.05 of Magic File Cabinet, the company's data base extender that lets you attach written notes, comments, and letters to your data base records. A favorable review of Magic File Cabinet appeared in the November 1991 issue of the *AppleWorks Forum*.

Owners of earlier versions of Magic File Cabinet can get a free upgrade to version 1.5 by sending the company the original Magic File Cabinet disk and a return mailer with correct postage.

Magic File Cabinet usually costs \$15. Until December 31, NAUG members can buy the program directly from the developer for \$12 plus \$2 s/h (Maryland members must add \$.70 sales tax). Add .50 s/h to Canada and Mexico and \$2 s/h to other countries.

Magical Software also announced the release of The Abracadabra Collection, a collection of professionally written macro enhancements to AppleWorks. Macros on the disk (a) automatically adjust the width of categories in multiple record layout, (b) cut and paste portions of word processor documents, (c) change pathnames, (d) reformat documents to save space when printed, (e) automatically number data base records, (f) strip extra returns from documents, (g) automatically align macro comments, (h) display large characters, simulated computer paper, center text in a zig-zag pattern and encrypt data on your screen, and (h) "flip" AppleWorks text so each line begins at the right and ends at the left edge of the screen.

The Abracadabra Collection usually costs \$8. However, until December 31, NAUG members can buy the Collection directly from the developer for \$6 postpaid (Maryland residents add .40 sales tax).

Magical Software does not accept credit cards; please enclose a check and your NAUG membership number with your order.

[Gary Hayman, Magical Software, 8255 Canning Terrace, Greenbelt, Maryland 20770; (301) 345-3230.]

New Disks in the NAUG Library

Barrows Utilities – Disk 6

The NAUG Public Domain Library now includes its sixth disk filled with useful AppleWorks accessories developed for NAUG by Roy Barrows. The utilities on this disk include:

CaseConvert: Changes the case of every character in a word processor document to upper or lower case. Also capitalizes the first letter of every word or the first letter of every sentence.

Cell.Jump: Jumps the cursor to any one of five cells that you specify. This is the spreadsheet equivalent of Mr. Barrow's Set.Marker utility for the word processor on Barrows Utilities – Disk 5.

Clip.View: Displays the contents of the AppleWorks clipboard.

File.Notes: Lets you write notes about a word processor document and automatically stores those notes at the end of the document.

MultiCalc: Limits spreadsheet recalculation to the cells you specify in a row or column. Dramatically speeds up recalculation of large spreadsheets.

Space.Indent: A substitute for AppleWorks' Indent Command, Space.Indent inserts "hard spaces" at the beginning of each line in your text. Lets you create attractively formatted paragraphs for documents you upload to communications services.

Utils.Print: A menu driven utility that can print one line at a time from your AppleWorks screen and can roll the printer forward or back up to nine lines. Designed for ImageWriter II printers; must be modified for other printers.

WordSum.II: A word counting utility for AppleWorks. WordSum.II is faster than the original WordSum utility on Barrows Utilities – Disk 2.

Barrows Utilities – Disk 6 includes both TimeOut and task file versions of each utility, word processor files with annotated copies of the macros, and documentation in an AppleWorks word processor file on the disk. The disk requires AppleWorks 3.0 enhanced with UltraMacros 3.1.

The disk also includes notes from Mr. Barrows about enhancing the <find> command in his macros and his plans to support Ultra 4 after the release of the Ultra 4 version of Macros to Menus. The disk also includes two TimeOut Glossary files Mr. Barrows uses to create his macros.

Stock Market Templates

Investors who want to track stock market, commodity, and money market trends will appreciate the eleven AppleWorks spreadsheet templates on NAUG's Stock Market Templates Disk. Templates on the disk track the weekly, quarterly, and annual Dow Jones Industrial, Transportation, and Utility Averages. Other templates track the weekly Commodity Index and the weekly New York Stock Exchange Index with formulas that compute the 13, 26, and 52 week moving averages for this index. The templates include historical data which goes back as far as 1897. Owners of TimeOut Graph can also use these templates to produce attractive and informative graphs and charts.

The Stock Market Templates Disk requires AppleWorks 2.x or later. The NYSE Index template requires 60K of AppleWorks desktop memory; the other templates fit on a 40K desktop.

The Stock Market Templates Disk is shareware. You send the author \$10 if you use the templates on the disk.

How to Get Disks

Unless otherwise noted, all disks are available in both 5.25-inch (\$4) and 3.5-inch (\$6) format, plus \$2 s/h *per order*. Order from: Public Domain Library, NAUG, Box 87453, Canton, MI 48187; (313) 454-1115; Fax: (313) 454-1965. NAUG accepts Visa and MasterCard. All NAUG disks (except system disks provided by Apple Computer) are also available for downloading from NAUG's electronic bulletin board (the Electronic Forum), and from the NAUG areas on CompuServe, America Online, and GENie.

Special Offers for NAUG Members

NAUG

NAUG announced that it will develop and distribute the 1992 versions of 1040Works, a set of professionally developed AppleWorks spreadsheet templates that prepare your Federal Income Tax returns. The templates help you collect and enter data, do all the necessary computations, and print the required tax forms. 1040Works is easy to use and includes complete documentation in a clearly written 64-page manual.

The 1992 version of 1040Works will prepare 23 of the most widely used Federal Income Tax schedules and forms (1040, Schedules A, B, C, D, E, F, R, SE, Forms 2106, 2119, 2210, 2441, 3903, 4562, 6251, 8283, 8582, 8582-CR, 8606, 8615, 8814, and 8829).

1040Works lists for \$32.95, NAUG members can get 1040Works for \$29.95 plus \$3.50 s/h. Owners of earlier versions of 1040Works can update to the 1992 templates for \$22.95 plus \$3.50 s/h. These prices remain unchanged from last year.

NAUG also announced that it will distribute the 1993 1040Works Tax Planner, a comprehensive tax planning package for AppleWorks. The 1040Works Tax Planner estimates your Federal Income Tax for 1993-1995, determines whether you will be affected by the Alternative Minimum Tax, calculates your correct withholding, calculates your quarterly tax payments, and compares alternative financial strategies to help minimize your federal tax liabilities. The 1040Works Tax Planner can help you time your investment decisions to maximize your after-tax yields.

The 1040Works Tax Planner lists for \$29.95; NAUG members can buy the Tax Planner for \$26.95 plus \$3.50 s/h. The Tax Planner costs \$19.95, including shipping if ordered with 1040Works or with a 1040Works update. Owners of last year's version of the Tax Planner can update to the 1993 Tax Planner for \$19.95 plus \$3.50 s/h.

NAUG will ship 1040Works and the 1040Works Tax Planner in February 1993; the exact date depends on when the IRS releases its final tax forms. Owners of earlier versions will receive update information and special order forms in December 1992. Please contact NAUG after January 1 if you own an earlier version of 1040Works and did not receive your update announcement.

New 1040Works buyers should wait for the order form and NAUG discount offer that will appear in the January 1993 issue of the *AppleWorks Forum*.

[National AppleWorks Users Group, Box 87453, Canton, Michigan 48187; (313) 454-1115; Fax: (313) 454-1965.]

Balloons Software

Big Text Machine (BTM) is a text presentation program that displays any ProDOS text file in a large, proportional font that you can read easily up to twenty feet from the computer monitor. The software's controllable scroll rate lets you use BTM to display any length message in an advertising environment or to serve the needs of visually impaired Apple II users.

BTM comes with English, Spanish, French, Italian, and German character sets and can print oversized output on any ImageWriter printer.

Individual copies of BTM cost \$35. NAUG members can buy the program directly from the developer for \$25, postpaid. Until February 28, 1993, schools can buy site licenses for \$65. Include \$6 postage for all overseas orders. For a free BTM demo disk, send four postage stamps to the publisher with your request.

[Balloons Software, 5201 Chevy Chase Parkway, NW, Washington, DC 20015; (202) 244-2223. America Online: pshapiro; GENie: P.Shapiro1; Internet pshapiro@pro-novapple.cts.com.]

Help with the AppleWorks Modules

by Nanette Luoma

How to Use this List

Use this month's list to find help with the AppleWorks modules. To the left of each volunteer's name are numbers indicating the modules that consultant supports.

1 = Word Processor	5 = Mail Merge
2 = Data Base	6 = AppleWorks Network
3 = Spreadsheet	
4 = Integration between modules	

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Sample Screen

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Electronic Index – November 92 Update

Enter the default values for these categories: Volume #: 7 • Issue #: 11 • Date: Nov 92

Letters to NAUG • 2 • MouseText on Apple IIe and IIc Screens • Katz, Howard • MouseText; Apple IIe; Apple IIc; ImageWriter II; word processor

Letters to NAUG • 2 • How to Get Better MouseText • Cohen, Marshall • MouseText; word processor; ImageWriter II

Letters to NAUG • 2 • Save Money on the BBS • Crosta, Pete • BBS; Electronic Forum; telecommunications

My Favorite Template • 3 • How to Produce Individualized Student Grade Reports • Hecker, Stan • gradebooks; Mail Merge; word processor; data base; templates

Software Review • 8 • AppleShare 3.0: A Better File Sharing System • Link, John • AppleShare; networks; fileserver; System 7; Macintosh; Ethernet; printing; spooler; AppleWorks GS; upgrades

Software Review • 9 • Spoolers and Buffers • Link, John • printing; buffer; spooler

Software Review • 10 • AppleShare, AppleTalk, and LocalTalk • Link, John • AppleShare; AppleTalk; LocalTalk; networks; fileserver; Ethernet

Software Review • 11 • Apple Releases AppleShare 3.0.1 • Link, John • AppleShare; networks; fileserver; upgrades

Software Review • 12 • Why Does Apple Treat Us this Way? • Link, John • Apple Computer; upgrades; AppleShare

General Interest • 13 • AppleWorks Inits: What They Are and How They Work • Brandt, Randy • inits; add-ons; JEM Software; OmniPrint; TotalControl; SpellCopy; DB Pix

General Interest • 14 • How to Install and Use Inits • Brandt, Randy • inits; add-ons

General Interest • 15 • JEM Announces Init City • Brandt, Randy • inits; add-ons; Init City

AppleWorks News • 16 • News from Apple, MECC, and Wm. C. Brown • N/A • Apple Computer; PowerBooks; bugs; MECC; Wm. C. Brown; catalogs

UltraMacros Primer • 17 • How to Use Dot Commands and Labels in Ultra 4 • Munz, Mark • Ultra 4; macros; UltraMacros; programming

Special Offers • 20 • Special Offers from Dan's Macro City and the Writing Notebook • N/A • Dan's Macro City; The Writing Notebook; TCX; telecommunications; BBS; Electronic Forum; education

My Favorite Macro • 22 • A Macro that Cleans Up Your Custom Dictionaries • Johnson, Keith • macros; UltraMacros; spell checkers; custom dictionaries; bugs; word processor

My Favorite Macro • 24 • How to Check Your Dictionary • Johnson, Keith • macros; spell checkers; custom dictionaries; word processor

My Favorite Macro • 25 • Problems with the AppleWorks Spell Checker • Johnson, Keith • macros; spell checkers; custom dictionaries; bugs; word processor

AppleWorks News • 25 • New Printers from Hewlett-Packard • printers; Hewlett-Packard; hardware; DeskJet

Educational Applications • 26 • How to Play "AppleWorks Anagrams" • Shapiro, Phil • word processor; games; education

Special Offers • 27 • Discounts from Magical Software • N/A • Magical Software; Magic File Cabinet; Abracadabra Collection; macros

Public Domain Update • 28 • New Disks in the NAUG Library • N/A • Public Domain; Barrows Utilities; Stock Market Templates

Special Offers • 29 • Special Offers from NAUG and Balloons Software • 1040Works; 1040Works Tax Planner; Big Text Machine

Members Helping Members • 30 • Help with the AppleWorks Modules • Luoma, Nanette • word processor; data base; spreadsheet; Mail Merge; networks; Members Helping Members

New Keywords: spooler; LocalTalk; inits; Init City; PowerBooks; Wm. C. Brown; The Writing Notebook; Big Text Machine; Stock Market Templates

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